WHAT IS CLAIMED IS:

1. A high-frequency sem conductor device comprising:

a ground plate provided on a semiconductor substrate;

a plurality of line conductors provided on said ground plate, forming a multiple layer structure with interlayer insulation films intervening therebetween that is composed of a resin insulating material;

a pad provided on most apper one of said interlayer insulation films; and a groove provided in said most upper one of said interlayer insulation films and between said pad and said line conductor on said most upper one of said interlayer insulation films.

- 2. A high-frequency semiconductor device as set forth in claim 1, wherein said groove is disposed to surround said pad.
- 3. A high-frequency semiconductor device as set forth in claim 1, wherein said groove is partially disposed in a region between said pad and said line conductor on said most upper one of said interlayer insulation films.
- 4. A high-frequency semiconductor device as set forth in claim 3, wherein said pad is disposed in a peripheral region along an edge of said semiconductor substrate, and said groove is partially disposed in a region on said semiconductor substrate except said peripheral region.
- 5. A high-frequency semiconductor device as set forth in claim 3, wherein a plurality of said grooves are provided in said most upper one of said interlayer insulation films.
- 6. A high-frequency semiconductor device as set forth in claim 1, comprising a through-hole provided in said most upper one of said interlayer insulation films on which said pad is provided, and said pad being connected to a potential via said through-hole.
- 7. A high-frequency semiconductor device as set forth in claim 1 includes a line conductor connected to said pad on said most upper one of said interlayer insulation films, and wherein

said groove is provided in a region except a connection portion for said line conductor connected to said pad passing therethrough.

- 8. A high-frequency semiconductor device as set forth in claim 1, wherein said groove is provided to have a ring shape within said semiconductor substrate, and said pad is provided on said most upper one of said interlayer insulation films outside said ring shaped groove.
- 9. A high-frequency semiconductor device as set forth in claim 1, wherein said interlayer insulation film is composed of a polyimid or benzocyclobutene.

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